

WE CLAIM:

1. In a spread-spectrum-communications system having a plurality of base stations and a remote station (RS), with the remote station communicating with a source-base station (BS) using spread-spectrum modulation, with the remote station transmitting data to the source-base station at a first BS data rate and a first BS power level, a method comprising the steps of:

monitoring, at the remote station, a first signal quality of ^athe first received-spread-spectrum ^{W. H.}signal;

scanning, at said remote station, a plurality of received-spread-spectrum signals radiated from the plurality of base stations, respectively;

storing, at said remote station, a plurality of signal qualities for the plurality of received-spread-spectrum signals, respectively;

selecting, from the plurality of received-spread-spectrum signals, at said remote station, using the plurality of signal qualities from the plurality of received-spread-spectrum signals, a second received-spread-spectrum signal having a second signal quality transmitted from a target-base station;

initiating, from said remote station, upon the first signal quality falling below any of ^athe predetermined ^{W. H.}handoff threshold, a handoff process;

transmitting, from said remote station, an RS-access-burst signal having a plurality of RS segments, with each RS

segment having a plurality of RS symbols carrying differentially encoded BS power-control information, with the plurality of RS segments having a plurality of RS power levels, increasing in time, respectively;

30 queuing, upon requesting the handoff process to the target-base station, RS data for transmission from said remote station;

receiving, at said target-base station, the RS-access-burst signal at an RS detected-power level;

35 transmitting from said target-base station a BS-access-burst signal having a plurality of BS segments, with each BS segment having a plurality of BS symbols carrying differentially encoded RS power-control information, with the plurality of BS segments having a plurality of BS power levels, increasing in time, respectively;

40 differentially encoding, responsive to detecting the BS-access-burst signal, the plurality of RS symbols with BS-power control information including power level for said target-base station;

45 differentially encoding, responsive to detecting the RS-access-burst signal, the plurality of BS symbols with RS-power control information including power level for said remote station;

receiving at said remote station, the BS-access-burst signal from said target-base station;

receiving at said target-base station, the RS-access-burst signal from said remote station;

transmitting, from said remote station to said target-base station, the queued RS data at a second RS data rate, with the second RS data rate greater than ^a the first RS data rate,^{N 14} thereby transferring the queued RS data to said target-base station;

transmitting, from said target-base station to said remote station, the queued BS data at a second BS data rate, with the second BS data rate greater than the first BS data rate, thereby transferring the queued BS data to said remote station;

transmitting, from said remote station to said target-base station, responsive to the queued RS data being transferred to the target-base station, at the first RS data rate; and

transmitting, from said target-base station to said remote station, responsive to the queued BS data being transferred to said remote station, at the first BS data rate.